

In the Claims:

The pending claims are listed below.

1-11. (canceled)

12. (original) An arrangement for analyzing an integrated circuit having a silicon on insulator (SOI) structure, the arrangement comprising;

means for directing a modulated optical beam at a selected portion of the SOI structure, the modulation being adapted to inhibit optical beam intrusion upon the integrated circuit; and

means for obtaining a reflected optical waveform response from the SOI selected portion.

13. (original) A system for analyzing an integrated circuit having a silicon on insulator (SOI) structure, the system comprising;

an optical beam arrangement adapted to direct a modulated optical beam at a selected portion of the SOI structure and to inhibit intrusion of the optical beam upon the integrated circuit via the modulation; and

a detection arrangement adapted to detect a reflected optical waveform response from the SOI structure selected portion.

14. (original) The system for analyzing an integrated circuit having a silicon on insulator (SOI) structure of claim 13, wherein the optical beam arrangement includes an infrared laser.

15. (original) The system for analyzing an integrated circuit having a silicon on insulator (SOI) structure of claim 14, wherein the optical beam arrangement is adapted to pulse the laser at femto-second-range pulses.

16. (original) The system for analyzing an integrated circuit having a silicon on insulator (SOI) structure of claim 14, further comprising a testing device adapted to operate the die.

17. (original) The system for analyzing an integrated circuit having a silicon on insulator (SOI) structure of claim 13, further comprising a computer arrangement coupled to the detector arrangement and adapted to receive and process the reflected optical waveform response.

18. (original) The system for analyzing an integrated circuit having a silicon on insulator (SOI) structure of claim 17, further comprising a visual output arrangement coupled to the computer arrangement and adapted to present data from the computer arrangement for visual analysis.

19. (original) The system for analyzing an integrated circuit having a silicon on insulator (SOI) structure of claim 18, wherein the visual output arrangement includes at least one of: a video monitor and a printer.

20. (original) The system for analyzing an integrated circuit having a silicon on insulator (SOI) structure of claim 19, wherein the computer arrangement includes waveform analysis software.